

# NEW PROJECT REQUEST FORM

## ES&H PROJECTS

Page 1

For Data Reference Use Only

a. Facility Code

b. ADS Number

### Activity Data Sheet (ADS) Identification Section

3. ADS Title: Sealing Floors of 1005R and 1005H to Comply with Article 12 Requirements

3a. ADS Area: (Select 1 only) ☒ ES&H ☐ Equally ES&H and Infrastructure or Program

4. Data Sheet Status Code: (Select 1 only) ☒ Open ☐ Closed ☐ Hold ☐ Discontinued ☐ Void

13. Contractor Division Collider-Accelerator Dept

14. Contr. Department Collider-Accelerator Dept

15. Contractor Manager Anthony Nicoletti

16. Contractor Phone 631-344-3961

17. DOE Manage Peter Kelley

18. DOE Phone 344-5784

Champion Email tonym@bnl.gov

Champion Pager 453-5885

### ES&H ADS Functional Areas

20. ES&H Functional Area Breakdown (Attach additional pages if necessary)

See Web Site: <http://epweb.pe.bnl.gov/infrastructure/projects/projects.htm> for listing

Functional Area	Sub-Area	% Total Cost
CW01 GW Protection		75%
CW05 Spill Prevention Control		25%

Percentage of costs attributable to:

21. Training: \_\_\_\_\_

22. Maintenance

### ADS Type Section

23. ADS Type: (Select 1 only) ☐ Core ☒ Compliance ☐ Improvement

24. Drivers (Attach additional pages as necessary)

See Web Site: <http://epweb.pe.bnl.gov/infrastructure/projects/projects.htm> for listing

Driver Type	Driver Code	Primary? (Just one)	Driver Title
ESH	SDWA		Safe Drinking Water Act
ORD	DOE 5400.01		General Environmental Protection Program
Other	Suffolk Article 12	X	Suffolk County Article 12

25. Compliance Comments (Attach additional pages as necessary)

These areas have been examined by the Suffolk County Article 12 Representative and the BNL ESD. Suffolk County requires the floors to be sealed for compliance. The buildings have UCON 170X heat transfer fluid, which could be released to the environment following a major system pressure boundary failure..

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### 26. ADS Description/Objective (Attach additional pages as necessary)

Buildings 1005H and 1005R contain piping and tanks with heat transfer fluid (UCON 170X). Suffolk County inspected these buildings and requires that the floors be sealed to act as secondary containment.

The floors of the HFBR, BMRR and the Collider-Accelerator Building 912A floors have been successfully sealed using HILTI CS 500 EP high-performance polyurea by the BNL carpenter shop.

This request is for funding the floor seals and installing ramping at personnel and rollup doors to contain any spills of the heat transfer fluid, should the system pressure boundary fail. Releases have occurred in the past without release from the building.

### 27. ADS Appraisal/Justification (Attach additional pages as necessary)

#### Benefit

1. Comply with the requirements of Suffolk County Article 12.
2. Reduce the possibility of releasing the heat transfer fluid to the environment, which could potentially contaminate the environment, harm aquatic life and result in a Reportable Occurrence.

#### Risk/Vulnerability

1. Possible release of fluid to environment.
2. Potential of Reportable Occurrence.
3. Loss of credibility with regulators and public following major release of fluid to environment.

#### Mitigating Actions

1. Past leaks have been small and no fluid has been from the building. The release is usually a mist since the system pressure is high. Chances of a major leak that pours out of door is insignificant.
2. Instrumentation is in place and the Cryogenic Control Room is continuously manned when the refrigeration system is operating. This allows for immediate operator awareness of a system problem and responses that mitigate the leak of heat transfer fluid.

Resource Structure Code (RSC): *(Check One)*

___	LIN	Line Item - Infrastructure	<u>X</u>	GPP/LL	GPP - Landlord (Site GPP Fund)
___	LIE	Line Item - ES&H	___	GPP/KA	GPP - High Energy Physics Specific
___	AIP/KA	AIP - High Energy Physics Specific	___	GPP/KB	GPP - Nuclear Physics Specific
___	AIP/KB	AIP - Nuclear Physics Specific	___	GPP/KC	GPP - Basic Energy Sciences Specific
___	AIP/KC	AIP - BES Specific (Former ARAM )	___	GPP/KP	GPP - OBER Specific
___	OPER	Operating Funds - Special Maintenance or ES&H Program Support			
___	OPER/XX	Department / Division Operating Funds ( xx - 2 Digit Dept / Div. Code)			

(Note: If the ADS is funded from an allocable cost pool, provide B&R makeup.)

42. Activity Cost Estimate (x \$1,000)

43. FTE Requirements

For departmental funded projects indicate cost expectations by FY. For all other projects place project total cost in the unfunded field.

	Estimated Implementation Costs in \$1,000	% ESH	FTEs (to two decimals)
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<b>Fiscal Year</b>	Operating Expense (OE)	Capital Equipment (CE)	General Plant Project (GPP)	Line Item Project (LIP)		Federal	Contractor
Prior Year (PY) <u>1999</u>							
Current Year (CY) <u>2000</u>							
Budget Year (BY) <u>2001</u>							
BY + 1 <u>2002</u>							
BY + 2 <u>2003</u>							
BY + 3 <u>2004</u>							
BY + 4 <u>2005</u>							
Unfunded* <u>2006</u>							

\* For Compliance activities with costs beyond BY + 4, enter total estimated cost to complete in the Unfunded row.

45. Cost Estimate Notes: (Provide information on estimate, source and date of estimate, if from an ILR give number, and whether or not engineering, project management, contingency and burden is included. )

An ILR was submitted to Plant Engineering on 3/22/02 for an estimate, ILR No. 4184445. The estimate was made on 6/6/02 and is summarized below (from Work Order # EPP325):

Building 1005H – Construction \$105,000, Engineering \$14,700 (Total cost of \$119,700)

Building 1005S – Construction \$225,225, Engineering \$31,532 (Total cost of \$256,757)

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## Minimum Required Information for ESH Activity Data Sheets

The fields which have not been redlined on the ADS above are mandatory fields which must be completed following the instructions below. If information is known and you wish to utilize a redlined field, please input your data for transcription to the main database.

3. Provide a concise and descriptive project title.
- 3a. Indicate that this is an ESH ADS
13. Provide two letter Department/Division Code.
15. Provide name of the project champion for the activity.
16. Phone number of project champion.
17. Provide name of DOE-BHG counterpart manager for the activity.
18. Phone number of DOE-BHG counterpart.
20. Functional area addressed and percentage of each if more than one (i.e. radiation protection, industrial safety, environmental protection, etc.). Please note that percentages of functional areas addressed must equal 100%.
23. Indicate ADS type (Core, Compliance, Improvement, Other).
24. If compliance is chosen, a regulatory driver or DOE Order must be provided. If choice is not available in the draw down list, select other and provide specific driver in #25.
25. If compliance, discuss nature of current non-compliance briefly.
26. This section should be introduced by a summary of the proposed action and the issue being addressed not to exceed six typed lines. The summary should then be followed by a detailed description of the proposed activity and the issues to be addressed.
27. This section should be introduced by bullets which succinctly discuss the benefits of completing the proposed activity. This should also not exceed six typed lines. Following the bullets should be a discussion of the current risks, how the proposal will alleviate the risk and a separate discussion of ways that the risk will be mitigated until the proposal is funded, provided mitigative measures can be employed.
37. Provide the anticipated funding source for this activity from the table provided.
44. Insert into the table the anticipated costs associated with the project and the appropriate column related to where funding would be anticipated from. Program funded activities

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(i.e. KA, KB, KC) should be placed into the GPP column. All operating funded activities including department/division supported and special maintenance activities should be placed in the OE column. Any project that is currently unfunded pending a decision to be made outside of your organization should be placed in the year 2005 at this time.

45. A statement or supporting information should be provided on how the estimate was arrived at. It should also be indicated as to whether the activity could be phase funded over two or more years or if circumstances require completion within the same fiscal year.